**Pulled From The Past Biomes & Productivity**

2.4.1 Define the term biome  
  
2.4.2 Explain the distribution, structure, and relative productivity of tropical rainforests, deserts, and any other biome  
  
4.2.2 Discuss the perceived vulnerability of tropical rainforests and their relative value in contributing to global biodiversity

2.5.5 Define the terms gross productivity, net productivity, primary productivity and secondary productivity  
  
2.5.6 Define the terms and calculate the values of both gross primary productivity (GPP) and net primary productivity (NPP) from given data  
  
2.5.7 Define the terms and calculate the values of both gross secondary productivity (GSP) and net secondary productivity (NSP) from given data

🡪Define NPP, GPP, NSP, GSP, and R

🡪Describe and evaluate a strategy for determining plant biomass

🡪What information do you need in order to determine each of the following: NPP, GPP, NSP, & GSP

🡪Describe the productivity, insulation, precipitation, and flora and fauna of the following biomes: desert, tundra, tropical rainforest, and temperate deciduous rainforest

🡪State the limiting factors for each of the biomes we have studied

🡪Define and explain primary productivity

🡪Compare primary productivity and secondary productivity

🡪Give three reasons why some biomes and more productive than others

🡪Draw on a world map the general locations of tropical rainforests, deserts, tundra, and temperate deciduous forests

🡪What are the two major abiotic factors that characterize biomes

🡪State three factors that influence productivity

🡪How might global warming impact various biomes?

🡪Explain the relationship between climate and NPP

🡪Write the formula to determine NPP

🡪Write the formula to determine NSP

🡪Explain how the Laws of Thermodynamics relate to productivity

🡪Draw systems diagrams of cellular respiration and of photosynthesis

🡪Draw a graph (with labeled axis) to show the change of productivity (NPP and GPP) during succession

🡪Write out the formulas for photosynthesis and for cellular respiration

🡪What is the unit for productivity?

🡪Explain the steps that would be take to measure secondary productivity (NSP) of a population of caterpillars living in a tree